IN THE CLAIMS

1-48 . (Cancelled)

49. (Currently amended) A method of decreasing blood pressure in ~~a first atrium of~~ a heart, ~~the method~~ comprising:

implanting a shunt with a valve element ~~using a catheter~~, between ~~said first~~ a left atrium and a ~~second~~right atrium of the heart.

50. (Currently amended) The method of claim 49 wherein said implanting includies~~ng~~ deploying a tubular element having two ends and two fixation elements disposed at said two ends respectively.

51. (Currently amended) The method of claim 49, comprising allowing an amount of blood suitable to substantially reduce blood pressure in the left atrium, to flow from said left~~first~~ atrium to said right~~second~~ atrium via said shunt when the pressure differential between said left~~first~~ atrium and said right~~second~~ atrium reaches a threshold.

52-58. (Cancelled)

59. (New) A shunt for decreasing blood pressure in a heart, comprising:

a valve suitable for operation between chambers of a heart, adapted to open only when a pressure level between opposite ends of the valve is above a threshold pressure greater than a normal pressure level over the cardiac cycle between the left atria and the right atria of a normal heart.

60. (New) A shunt according to claim 59, wherein the valve is adapted to allow passage of blood therethrough throughout the cardiac cycle.

61. (New) A shunt according to claim 59, wherein the valve is adapted to be implanted in an internal wall of the heart.

62. (New) A shunt according to claim 59, wherein the valve is purely mechanical.

63. (New) A shunt according to claim 59, wherein the valve is adapted to open under predetermined conditions which do not change without human intervention.

64. (New) A shunt according to claim 59, whercin the threshold has a value such that when a pressure differencc between the left and right atriums is greater than the threshold, the patient is considered suffering from pulmonary edema.

65. (New) A shunt according to claim 59, wherein the threshold has a value such that when a pressure difference between the left and right atriums is greater than the threshold, the patient is considered in an exacerbated state of heart failure.

66. (New) A shunt according to claim 59, wherein the valve is configured to open only when a pressure between the opposite cnds of the valve is between a lower pressure threshold and a higher pressure threshold.

67. (New) A shunt according to claim 59, comprising a tube encompassing the valve.

68. (New) A shunt according to claim 67, wherein the tube has a diameter of less than 5 mm.

69. (New) A shunt according to claim 67, wherein the valve is configured to allow passage of a relatively small volume of blood relative to an ejection volume of the heart.

70. (New) A shunt according to claim 67, wherein the tube has a length not substantially greater than a thickness of walls between chambers of the heart.

71. (New) A shunt according to claim 59, wherein the valve allows continuous flow of a small amount of blood.

72. (New) A shunt according to claim 71, comprising a pump adapted to induce the continuous flow of blood through the valve.

73. (New) A shunt according to claim 59, wherein the valve is adapted to open gradually.

74. (New) A shunt according to claim 59, wherein the valve is configured to close after the pressure level between opposite ends of the valve reduces by a predetermined value.

75. (New) A shunt according to claim 59, wherein the conditions which cause opening of the valve are adjustable from outside a patient's body when the shunt is implanted in the patient's heart.

76. (New) A shunt according to claim 59, comprising at least one fixation element connected to the valve and adapted to be fixed to the heart.

77. (New) A shunt according to claim 76, wherein the at least one fixation element comprises at least two fixation elements.

78. (New) A shunt according to claim 77, wherein the valve is located in a tube and wherein a first one of the fixation elements is located on a first end of the tube and a second one of the fixation elements is located on a second end of the tube.

79. (New) A shunt according to claim 59, wherein the valve comprises a tubular element including at least a flat pivoting plate.

80. (New) A shunt according to claim 59, comprising a pump adapted to induce flow through the valve when the valve is open.

81. (New) A shunt according to claim 59, comprising an external indicator adapted to provide an indication on a status of the valve.

82. (New) A shunt according to claim 81, wherein the external indicator is adapted to indicate when the valve opens.

83. (New) A shunt according to claim 81, wherein the external indicator comprises a display.

84. (New) A method of controlled decreasing of blood pressure in a heart chamber, comprising:

providing a valve adapted to operate within a heart; and

implanting the valve in a heart between two heart chambers, such that the valve opens responsive to a pressure level of an exacerbated state of heart failure but not under normal pressures of systole and diastole of a normal heart.

85. (New) The method of claim 84, wherein implanting the valve in the heart comprises implanting between a first atrium and a second atrium.

86. (New) The method of claim 84, wherein implanting the valve in the heart comprises implanting between a left atrium and a right atrium, such that opening the valve allows flow of blood from the left atrium to the right atrium.

87. (New) The method of claim 84, wherein providing the valve comprises providing a valve configured to open only when the pressure in the left atrium is above a predetermined threshold.

88. (New) The method of claim 87, wherein providing the valve comprises providing a valve configured to open only when the pressure in the left atrium is above 12mmHg.

89. (New) The method of claim 84, wherein implanting the valve comprises implanting in a manner which leads blood to the right ventricle.

90. (New) The method of claim 84, wherein implanting the valve comprises implanting in a septum.

91. (New) The method of claim 84, comprising notifying a physician when the valve opens.

92. (New) A method according to claim 84, wherein the valve is adapted to allow passage of blood therethrough only during diastole.

93. (New) A method according to claim 84, wherein providing the valve comprises providing a valve including a signal processing element adapted to control the opening of the valve.

94. (New) A method according to claim 93, wherein providing the valve comprises providing a valve including an intra-corporeal electrical battery configured to power the signal processing element.

95. (New) A method according to claim 93, wherein providing the valve comprises providing a valve including an externally coupled energy source which powers the signal processing element.

96. (New) A method according to claim 93, wherein the signal processing element is configured to adaptively change the conditions which cause opening of the valve.

97. (New) A method according to claim 84, wherein providing the valve comprises providing a valve including a sensor adapted to sense a state of the heart and wherein the valve is adapted to open at least partially responsive to readings of the sensor.

98. (New) A method according to claim 84, wherein the valve is configured to open when the heart suffers from an exacerbated absolute arterial pressure or an exacerbated differential arterial pressure.

99. (New) A method according to claim 84, wherein the valve is configured to close after drainage of an amount of blood sufficient to reduce the mean left atrium pressure by 5mmHg.

100. (New) A method according to claim 84, wherein the valve is configured to open responsive to a differential pressure level between its opposite ends.

101. (New) The method of claim 84, wherein implanting the valve comprises implanting in a percutaneous procedure.

102. (New) The method of claim 84, comprising puncturing a transseptal hole and wherein implanting the valve comprises implanting the valve in the transseptal hole.

103. (New) A shunt for installation in a heart, comprising:

a valve suitable for operation within the heart;

a sensor adapted to sense a parameter indicative of a state of the heart; and

a controller adapted to open the valve at least partially responsive to readings from the sensor.

104. (New) A shunt according to claim 103, wherein the sensor comprises a pressure sensor.

105. (New) A shunt according to claim 104, wherein the controller is adapted to open the valve when the pressure read by the sensor is above a highest pressure in the left atrium in a normal heart.

106. (New) A shunt according to claim 105, wherein the valve is configured to open when the sensor indicates a pressure above 12mmHg.

107. (New) A shunt according to claim 105, wherein the valve is configured to open when the sensor indicates a pressure above 15mmHg.

108. (New) A shunt according to claim 105, wherein the valve is configured to open when the sensor indicates a pressure above 20mmHg.

109. (New) A shunt according to claim 105, wherein the controller is adapted to control the opening of the valve at least partially responsive to a condition outside the heart.

110. (New) A shunt according to claim 103, wherein at least one parameter or rule governing the opening of the valve by the controller changes adaptively.

111. (New) The method of claim 49, comprising puncturing a transseptal hole and wherein implanting the shunt comprises implanting in the punctured transseptal hole.